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| 10/625,321  | 07/23/2003  | Peter Michael Edic   | 120521-2/YOD<br>GERD:0052 | 7756             |
| 7590  | 04/26/2006  |                      | EXAMINER                  |                  |
| Patrick S. Yoder<br>FLETCHER YODER<br>P.O. Box 692289<br>Houston, TX 77269-2289 |             |                      | HO, ALLEN C               |                  |
|   |             |                      | ART UNIT                  | PAPER NUMBER     |
|   |             |                      | 2882                      |                  |

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/625,321 | <b>Applicant(s)</b><br>EDIC ET AL. |  |
|                              | <b>Examiner</b><br>Allen C. Ho       | <b>Art Unit</b><br>2882            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,9-15,17-23,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-15,17-23,25 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. The finality of the Office action mailed is hereby withdrawn in view of the new grounds of rejections set forth below.

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 17-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites "a gantry comprising a distributed x-ray source configured to rotate about a volume of interest in eight or more second". It is unclear whether this rotational motion refers to the gantry or the distributed x-ray source. In the first case, the gantry is stationary while the distributed x-ray source rotates about a volume of interest. In the second case, the distributed x-ray source is mounted on the rotating gantry.

#### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 17 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Morgan (U. S. Patent No. 6,229,870 B1).

With regard to claim 17, Morgan disclosed a CT image analysis system, comprising: a gantry (C) comprising a distributed x-ray source (B), wherein the distributed x-ray source comprises a plurality of addressable x-ray focal spots (column 5, line 53 - column 6, line 3); a detector (14) comprising a plurality of detector elements; a system controller (16) configured to control the x-ray source and to acquire a set of projection data during one or more rotations of the x-ray source about a dynamic object from one or more of the detector elements via a data acquisition system (18); and a computer system (18) configured to receive the set of projection data.

With regard to claim 25, Morgan disclosed a CT image analysis system, comprising: means for rotating a gantry (C) comprising a distributed x-ray source (B), wherein the distributed x-ray source comprises a plurality of addressable x-ray focal spots (column 5, line 53 - column 6, line 3); means for emitting x-rays from a portion of the distributed x-ray source; and means (18) for acquiring a projection data set comprising a plurality of projections generated from the emitted x-rays.

Morgan disclosed all of the positively recited structures in the claims. As such, the gantry disclosed by Morgan is as capable of rotating about a volume of interest in eight or more seconds as the gantry of the claims.

Alternatively, in an interpretation that the gantry of the claims is considered to distinguish structurally from the gantry disclosed by Morgan, the following obviousness rejection under 35 U.S.C. 103(a) is deemed appropriate.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 9, 17, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U. S. Patent No. 6,229,870 B1) in view of Casey *et al.* (U. S. Patent No. 5,175,754).

With regard to claim 1, Morgan disclosed a method for acquiring a projection data set, comprising: rotating a gantry (C) comprising a distributed x-ray source (B) about a volume of interest, wherein the distributed x-ray source comprises a plurality of addressable x-ray focal spots (column 5, line 53 - column 6, line 3); emitting x-rays from the distributed x-ray source; and acquiring (14) a projection data set comprising a plurality of projections generated from the emitted x-rays.

However, Morgan failed to disclose that the rotational period of the gantry is greater than eight seconds.

Although Casey *et al.* failed to disclose a rotational period greater than eight seconds (Casey *et al.* disclosed a rotational period of eight seconds, column 1, lines 64-66), Casey *et al.* taught that the number of projections acquired is determined by the rotational period of the gantry. Since the quality of the reconstructed image depends on the number of acquired projections, it is obvious that a longer rotational period would yield better images (column 1, lines 61-62).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ a gantry rotational period that is greater than eight seconds, since a person would be motivated to obtain a high quality image by acquiring more projections at a higher angular resolution.

With regard to claim 9, Morgan and Casey *et al.* disclosed the method as recited in claim 1.

However, Morgan and Casey *et al.* failed to disclose a computer program provided on one or more computer readable media, the computer program comprises routines that implement the method as recited in claim 1.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the method in the form of a computer program, since a person would be motivated to implement the method on a CT system that is controlled by a computer.

With regard to claim 17, Morgan disclosed a CT image analysis system, comprising: a gantry (C) comprising a distributed x-ray source (B), wherein the distributed x-ray source comprises a plurality of addressable x-ray focal spots (column 5, line 53 - column 6, line 3); a detector (14) comprising a plurality of detector elements; a system controller (16) configured to control the x-ray source and to acquire a set of projection data during one or more rotations of the x-ray source about a dynamic object from one or more of the detector elements via a data acquisition system (18); and a computer system (18) configured to receive the set of projection data.

With regard to claim 25, Morgan disclosed a CT image analysis system, comprising: means for rotating a gantry (C) comprising a distributed x-ray source (B), wherein the distributed

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x-ray source comprises a plurality of addressable x-ray focal spots (column 5, line 53 - column 6, line 3); means for emitting x-rays from a portion of the distributed x-ray source; and means (18) for acquiring a projection data set comprising a plurality of projections generated from the emitted x-rays.

However, Morgan failed to disclose a gantry that is configured to rotate about a volume of interest in eight or more seconds.

Casey disclosed that a gantry of a commercial computed tomography rotates about a volume of interest for eight seconds (column 1, lines 61-62). Casey *et al.* taught that the number of projections acquired is determined by the length of time during which the gantry rotates about a volume of interest. Since the quality of the reconstructed image depends on the number of acquired projections, it is obvious that a gantry rotating longer about a volume of interest would yield better images (column 1, lines 61 - column 2, line 13).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure the gantry to rotate about a volume of interest for eight or more seconds, since a person would be motivated to obtain a high quality image by acquiring more projections at a higher angular resolution.

8. Claims 2-5 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U. S. Patent No. 6,229,870 B1) and Casey *et al.* (U. S. Patent No. 5,175,754) as applied to claims 1 and 9 above, and further in view of Yamagishi (U. S. Patent No. 5,383,231).

With regard to claims 2 and 10, Morgan and Casey *et al.* disclosed the method and the computer program as recited in claims 1 and 9, respectively.

However, Morgan and Casey *et al.* failed to disclose a method that comprises the steps of generating a set of interpolated projections by interpolating the projection data set using a set of concurrently acquired phase data and frequency content of the projection data set, wherein each interpolated projection characterizes the projection data set at a view location of the gantry and at a particular time; and reconstructing the set of interpolated projections to generate one or more images.

Yamagishi disclosed a method for acquiring a CT image of a heart, comprising the steps of generating (13) a set of interpolated projections by interpolating the projection data set using a set of concurrently acquired phase data (12) and frequency content of the projection data set (the projection data set are acquired at a frequency or time interval), wherein each interpolated projection characterizes the projection data set at a view location of the gantry and at a particular time; and reconstructing (13) the set of interpolated projections to generate one or more images (column 5, line 53 - column 6, line 30). Yamagishi taught this method is capable of obtaining a three-dimensional image of a heart without motion artifacts (column 2, lines 30-36).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to generate a set of interpolated projections by interpolating the projection data set using a set of concurrently acquired phase data and frequency content of the projection data set and to reconstruct the set of interpolated projections to generate one or more images, since a person would be motivated to obtain a three-dimensional image of a heart without motion artifacts for diagnosis.



With regard to claims 3 and 11, Morgan, Casey *et al.*, and Yamagishi disclosed the method and the computer program as recited in claims 2 and 10, respectively, further comprising associating two or more images to generate a volume rendering (Morgan 22).

With regard to claims 4 and 12, Morgan, Casey *et al.*, and Yamagishi disclosed the method and the computer program as recited in claims 2 and 10, respectively, wherein the volume of interest comprises a heart having a cardiac period (Yamagishi).

With regard to claims 5 and 13, Morgan, Casey *et al.*, and Yamagishi disclosed the method and the computer program as recited in claims 4 and 12, respectively.

However, Morgan, Casey *et al.*, and Yamagishi failed to disclose a rotational period is approximately a multiple of the cardiac period.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to set a rotational period that is approximately a multiple of the cardiac period, since a person would be motivated to acquire projection data set that comprises several complete cardiac periods.

9. Claims 6, 7, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U. S. Patent No. 6,229,870 B1), Casey *et al.* (U. S. Patent No. 5,175,754), and Yamagishi (U. S. Patent No. 5,383,231) as applied to claims 2 and 10 above, and further in view of Taguchi (U. S. Patent No. 6,466,640 B1).

With regard to claims 6 and 14, Morgan, Casey *et al.*, and Yamagishi disclosed the method and the computer program as recited in claims 2 and 10, respectively.

However, Morgan, Casey *et al.*, and Yamagishi failed to teach that the step of interpolating the projection data set comprises reducing statistical noise in the projection data set.

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Taguchi disclosed a method of interpolating the projection data set that reduces statistical noise in the projection data set (column 15, lines 4-34).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to reduce statistical noise during interpolation, since a person would be motivated to obtain an image without noise.

With regard to claims 7 and 15, Morgan, Casey *et al.*, Yamagishi, and Taguchi disclosed the method and the computer program as recited in claims 6 and 14, respectively, further comprising reducing an x-ray dose applied to the volume of interest in response to the reduction in statistical noise (column 15, lines 4-34).

10. Claims 18-21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U. S. Patent No. 6,229,870 B1) as applied to claims 17 and 25 above, and further in view of Yamagishi (U. S. Patent No. 5,383,231).

With regard to claim 18, Morgan disclosed the CT image analysis system as recited in claim 17.

However, Morgan failed to disclose a computer system configured to generate a set of interpolated projections by interpolating the set of projection data using a set of concurrently acquired phase data and the frequency content of the set of projection data, wherein each interpolated projection characterizes the projection data set at a view location of the gantry and at a particular time and to reconstruct the set of interpolated projections to generate one or more images.

Yamagishi disclosed a computer system (13) that generates a set of interpolated projections by interpolating the projection data set using a set of concurrently acquired phase

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data (12) and frequency content of the projection data set (the projection data are acquired at a frequency or time interval), wherein each interpolated projection characterizes the projection data set at a view location of the gantry and at a particular time; and reconstructs the set of interpolated projections to generate one or more images (column 5, line 53 - column 6, line 30). Yamagishi taught this computer system is capable of obtaining a three-dimensional image of a heart without motion artifacts (column 2, lines 30-36).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a computer system disclosed by Yamagishi, since a person would be motivated to obtain a three-dimensional image of a heart without motion artifacts for diagnosis.

With regard to claim 19, Morgan and Yamagishi disclosed the CT image analysis system as recited in claim 18, wherein the computer system is further configured to associate two more images to generate a volume rendering (Morgan 22).

With regard to claim 20, Morgan and Yamagishi disclosed the CT image analysis system as recited in claim 18. Claim 20 fails to set forth additional structural limitation. Consequently, claim 20 is rejected with claim 18. MPEP § 2115.

With regard to claim 21, Morgan and Yamagishi disclosed the CT image analysis system as recited in claim 20. Claim 21 fails to set forth additional structural limitation. Consequently, claim 21 is rejected with claim 20. MPEP § 2114.

With regard to claim 26, Morgan disclosed the CT image analysis system as recited in claim 25.

However, Morgan failed to disclose means for generating a set of interpolated projections using a set of concurrently acquired phase data and the frequency content of the projection data set, and means for reconstructing the set of interpolated projections to generate one or more images.

Yamagishi disclosed means (13) for generating a set of interpolated projections by interpolating the projection data set using a set of concurrently acquired phase data (12) and frequency content of the projection data set (the projection data are acquired at a frequency or time interval), wherein each interpolated projection characterizes the projection data set at a view location of the gantry and at a particular time; and means (13) for reconstructing the set of interpolated projections to generate one or more images (column 5, line 53 - column 6, line 30). Yamagishi taught these means are capable of obtaining a three-dimensional image of a heart without motion artifacts (column 2, lines 30-36).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide means for generating a set of interpolated projections and means for reconstructing the set of interpolated projections to generate one or more images disclosed by Yamagishi, since a person would be motivated to obtain a three-dimensional image of a heart without motion artifacts for diagnosis.

11. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U. S. Patent No. 6,229,870 B1) and Yamagishi (U. S. Patent No. 5,383,231) as applied to claim 18 above, and further in view of Taguchi (U. S. Patent No. 6,466,640 B1).

With regard to claim 22, Morgan and Yamagishi disclosed the CT image analysis system as recited in claim 18.

However, Morgan and Yamagishi failed to disclose a computer system configured to generate a set of interpolated projections, wherein generating a set of interpolated projections reduces statistical noise in the set of projection data.

Taguchi disclosed a method of interpolating the projection data set that reduces statistical noise in the projection data set (column 15, lines 4-34).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure the computer system to reduce statistical noise during interpolation, since a person would be motivated to obtain an image without noise.

With regard to claim 23, Morgan, Yamagishi, and Taguchi disclosed the CT image analysis system as recited in claim 22, wherein the computer system is further configured to reduce an x-ray dose applied to the volume of interest in response to the reduction in statistical noise (column 15, lines 4-34).

12. Claims 18-21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U. S. Patent No. 6,229,870 B1) and Casey *et al.* (U. S. Patent No. 5,175,754) as applied to claims 17 and 25 above, and further in view of Yamagishi (U. S. Patent No. 5,383,231).

With regard to claim 18, Morgan and Casey *et al.* disclosed the CT image analysis system as recited in claim 17.

However, Morgan failed to disclose a computer system configured to generate a set of interpolated projections by interpolating the set of projection data using a set of concurrently acquired phase data and the frequency content of the set of projection data, wherein each interpolated projection characterizes the projection data set at a view location of the gantry and at

a particular time and to reconstruct the set of interpolated projections to generate one or more images.

Yamagishi disclosed a computer system (13) that generates a set of interpolated projections by interpolating the projection data set using a set of concurrently acquired phase data (12) and frequency content of the projection data set (the projection data are acquired at a frequency or time interval), wherein each interpolated projection characterizes the projection data set at a view location of the gantry and at a particular time; and reconstructs the set of interpolated projections to generate one or more images (column 5, line 53 - column 6, line 30). Yamagishi taught this computer system is capable of obtaining a three-dimensional image of a heart without motion artifacts (column 2, lines 30-36).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a computer system disclosed by Yamagishi, since a person would be motivated to obtain a three-dimensional image of a heart without motion artifacts for diagnosis.

With regard to claim 19, Morgan, Casey *et al.* and Yamagishi disclosed the CT image analysis system as recited in claim 18, wherein the computer system is further configured to associate two more images to generate a volume rendering (Morgan 22).

With regard to claim 20, Morgan, Casey *et al.*, and Yamagishi disclosed the CT image analysis system as recited in claim 18. Claim 20 fails to set forth additional structural limitation. Consequently, claim 20 is rejected with claim 18. MPEP § 2115.

With regard to claim 21, Morgan, Casey *et al.*, and Yamagishi disclosed the CT image analysis system as recited in claim 20. Claim 21 fails to set forth additional structural limitation. Consequently, claim 21 is rejected with claim 20. MPEP § 2114.

With regard to claim 26, Morgan and Casey *et al.* disclosed the CT image analysis system as recited in claim 25.

However, Morgan and Casey *et al.* failed to disclose means for generating a set of interpolated projections using a set of concurrently acquired phase data and the frequency content of the projection data set, and means for reconstructing the set of interpolated projections to generate one or more images.

Yamagishi disclosed means (13) for generating a set of interpolated projections by interpolating the projection data set using a set of concurrently acquired phase data (12) and frequency content of the projection data set (the projection data are acquired at a frequency or time interval), wherein each interpolated projection characterizes the projection data set at a view location of the gantry and at a particular time; and means (13) for reconstructing the set of interpolated projections to generate one or more images (column 5, line 53 - column 6, line 30). Yamagishi taught these means are capable of obtaining a three-dimensional image of a heart without motion artifacts (column 2, lines 30-36).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide means for generating a set of interpolated projections and means for reconstructing the set of interpolated projections to generate one or more images disclosed by Yamagishi, since a person would be motivated to obtain a three-dimensional image of a heart without motion artifacts for diagnosis.

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13. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U. S. Patent No. 6,229,870 B1), Casey *et al.* (U. S. Patent No. 5,175,754), and Yamagishi (U. S. Patent No. 5,383,231) as applied to claim 18 above, and further in view of Taguchi (U. S. Patent No. 6,466,640 B1).

With regard to claim 22, Morgan, Casey *et al.*, and Yamagishi disclosed the CT image analysis system as recited in claim 18.

However, Morgan, Casey *et al.*, and Yamagishi failed to disclose a computer system configured to generate a set of interpolated projections, wherein generating a set of interpolated projections reduces statistical noise in the set of projection data.

Taguchi disclosed a method of interpolating the projection data set that reduces statistical noise in the projection data set (column 15, lines 4-34).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure the computer system to reduce statistical noise during interpolation, since a person would be motivated to obtain an image without noise.

With regard to claim 23, Morgan, Casey *et al.*, Yamagishi, and Taguchi disclosed the CT image analysis system as recited in claim 22, wherein the computer system is further configured to reduce an x-ray dose applied to the volume of interest in response to the reduction in statistical noise (column 15, lines 4-34).

### ***Response to Arguments***

14. Applicant's arguments filed 23 March 2006 have been fully considered but they are not persuasive.



With regard to claims 1 and 9, the applicants argue that Casey *et al.* disclosed motivation for having CT gantry having higher, not lower, rotational periods, so that images of moving organs may be obtained. The examiner presumes that the applicants meant higher, not lower, rotational speeds. As noted by the examiner previously, this is only a special circumstance. Casey *et al.* specifically stated that the "resultant lower resolution image produced by these fewer samples may be acceptable in some circumstances, such as imaging a moving organ, where the elimination of motion induced blurring is an important consideration" (column 2, lines 1-5). When moving organ is not a consideration, a person would be motivated to obtain a better image quality with a longer rotational period/slower rotational speed.

With respect to claims 17 and 25, the applicants argue that Morgan failed to disclose a rotating gantry configured to complete one revolution in eight or more seconds. The examiner respectfully disagrees with this argument because this argument is based upon feature not recited in the claims. Unlike claims 1 and 9, which claim a rotational period (*i. e.*, rotational speed), claims 17 and 25 claim only a rotational duration, which does not set forth a rotational speed. A person skilled in the art would know that any motorized gantry is capable of rotating for any duration, at a rotational speed that may or may not be eight or more seconds per revolution. For example, as noted by Casey *et al.*, a commercial CT gantry may have a rotational speed of eight seconds per revolution or two seconds per revolution. If this CT gantry rotates four revolutions at two seconds per revolution, then it would have rotated for eight seconds, which would read on the claims.

For the above reasons, the rejections are being maintained.

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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen C. Ho, Ph.D.  
Primary Examiner  
Art Unit 2882

22 April 2006